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**Citation for published version:**

Ward Thompson, C 2016, 'Landscape Research editorial: Landscape and Health Special Issue', *Landscape Research*, vol. 41, no. 6, pp. 591-597. <https://doi.org/10.1080/01426397.2016.1196878>

**Digital Object Identifier (DOI):**

[10.1080/01426397.2016.1196878](https://doi.org/10.1080/01426397.2016.1196878)

**Link:**

[Link to publication record in Edinburgh Research Explorer](#)

**Document Version:**

Peer reviewed version

**Published In:**

Landscape Research

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## **Landscape Research editorial**

### **Landscape and Health Special Issue**

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Throughout history, people have been attracted to towns from the countryside, not just for jobs and commerce but for social interaction, education, the chance to meet different people, or simply to 'lose oneself in the crowd', to escape the unwelcome attention of a small, rural community. Europe as a whole is now a highly urbanised society, with 72% or more living as urban residents, and in westernised countries such as Britain, USA and Australia, the percentage is even higher (81 - 89%) (The World Bank, 2015). Yet the density of cities and urban populations puts pressure not only on resources and public services but also on individuals who may find at times that the dynamic, busy, man-made environment places more demands on them than they can cope with. Even for those living and working in countryside areas, agriculture is increasingly associated with industrial-scale production sites that offer little relief from inflexible and mechanically structured outdoor environments. Few people live near truly wild environments where human intervention is not a dominant force in the landscape, and even fewer are likely to be engaged in work or other daily activities that require them to be out in that landscape for much of the time.

It is timely therefore to revisit the topic of landscape and health in this Special Issue, to consider how the landscape might offer opportunities for health benefit but also how different experiences of landscape might be more or less therapeutic for different individuals or groups. This is a topic of considerable interest at present, given the pressures on health service providers at a time of economic recession and reductions in public spend. While there are many problems for physical health in the population associated with our westernised lifestyles, reflected in growing levels of obesity, diabetes and poor cardio-vascular health, there are also alarmingly high levels of poor mental health. It is estimated that 27% of the adult European population experience at least one mental disorder in any given year (WHO, 2014). This has a detrimental effect on families and relationships as well as work and productivity. One aspect of poor mental health is the stress that may be associated with socio-economic deprivation or the pressures of modern urbanised lifestyles and the expectations of the workplace. It is now recognised that chronic stress leads to 'wear and tear' on the body – the allostatic load – that is detrimental to physical health and longevity as well as to mental health.

The much-cited World Health Organisation' (1948) definition of health: "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" has been challenged in the last decade. It has been suggested that health is also a state of being where, regardless of whether they actually experience any kind of physical or psychosocial impairment, short-term or chronic, a person finds themselves able to cope satisfactorily with existing conditions. The former director of WHO's Division of Mental Health has proposed that "health is a state of balance, an equilibrium that an individual has established within himself and between himself and his social and physical environment" (Sartorius, 2006, p. 662).

This is a helpful extension to the notion of health, embracing the environment as a factor that may either support or frustrate a person's ability to cope with daily life. And it recognizes that one person may have a range of impairments or medical conditions, but nonetheless consider them selves in good health, while another, without any outward appearance or diagnosis of ill-health, may consider themselves unwell. What is of interest for us in this Special Issue is how qualities of particular landscapes in place and time may support health, accepting this enlarged definition of health and recognising that some landscapes may be experienced only fleetingly, or at particular moments of need, while others may form part of a salutogenic (i.e. health-supporting) environment over many years, or even a lifetime.

A burgeoning literature over the last few decades suggests that access to green space and natural environments may offer health benefits that not only contribute to reductions in ill-health as measured by publicly available health data but, perhaps just as importantly, offer opportunities for people to manage their own health and cope with illness. This view of the landscape as therapeutic or palliative is one that has resonated historically (see, for example, Gesler, 1992; Cooper Marcus and Barnes, 1999; Ward Thompson, 2011) and has been discussed both in relation to particular landscapes chosen or designed for their therapeutic qualities, and in relation to more everyday landscapes within and around the urban environment.

A further line of enquiry recognises the importance of understanding how different people may perceive and experience the landscape in different ways, and therefore benefit (or otherwise) to different degrees. While epidemiological and other large-scale studies at the population level have helped to make the over-arching case for considering landscape qualities as potentially salutogenic, we also need to understand how this may vary according to landscape type, access to it, and the diversity inherent in different groups and individuals at varying stages in their life course. There may be some commonalities in the human condition that respond to qualities of green or natural environments based on our evolution as a species, as suggested by researchers like Ulrich (1983; 1991) and more recently pointed to by further evidence of psychoneuroendocrine responses (e.g. Park et al., 2010; Roe et al; 2013). But people are diverse in so many dimensions that it would not be surprising to find their engagement with, and response to, the landscape varies too. This Special Issue explores such different dimensions of relationships between landscape and health, at an individual and sub-group level and at a societal level.

In this context, it is interesting to note how consistently, in the westernised world at least, we associate the landscape with health benefit and positive feelings, perhaps reflecting our urban lifestyles and a romanticised attitude to a natural environment that is often hard to access in practice. But this was certainly not always true historically, and there are many parts of the world where the natural environment still offers many hazards, from floods and landslides to wild animals and disease vectors, some of which may return to challenge the developed world more forcefully under climate change. This is no doubt one of the foundations for the widespread evocation of an idealised landscape across many different cultures and geographical zones, from the Buddhist gardens of Amida to the Persian paradise tradition that has influenced so much of our Eurasian garden culture. Throughout history, it seems

that people (perhaps only a privileged few) have evoked gardens that were not merely practical places for growing things but gardens of sensory delight and an idealized version of 'nature', that excluded the unpleasant, the dangerous and the unwelcome.

What does this mean for the kinds of landscapes we want and need in our urbanised world today, to enhance the health of all people, regardless of ability, income or ethnicity? Well-managed gardens have been attractive as a private retreat from time immemorial and still seem to offer something important, recognised by widely varying groups of people. The restrictions that can be placed on access to private gardens allow some aspects of the paradise garden to endure: the idea that it is a safe and secure place, where the natural world is carefully managed but nonetheless experientially rich. This is perhaps especially important as a resource for the very young and the very old, and for people with some kinds of impairment or illness and those who care for them.

By contrast, public parks (like urban squares) have been popular since the nineteenth century as a place to meet (or at least observe) diversity and difference, to encounter groups and individuals who may be like us or very different from us. They are therefore important both as a place for offering some public version of the paradise garden, a comparatively safe haven in a managed, natural world, but also a place that offers some of the positive qualities of the city. They allow us to enjoy the pleasures of meeting with family or friends in attractive surroundings, regardless of the constraints of the buildings in which we live. They allow us a place and a context where we can get away from people, too, if we want to be alone and with space around us. And they also allow us to watch from a distance those whom we don't know or have connections with, to get a sense of the 'other' in society, without having to engage at a personal level. On top of this, they offer a natural (if managed) environment for multi-sensorial experience. In human evolutionary terms, they are a very recent phenomenon, and perhaps we are still coming to terms with what they mean for the anthropogenic age, but they may be important as the *only* green or natural spaces with which many people have contact, and therefore play a prime role in our future development, both individually and as a species.

This brings me to 'wild' or semi-natural areas, sometimes still contained within urban areas but more often on the fringes or in the more remote countryside. These have performed different roles in recent history, from liminal areas of informal activity to places for nature study or where people can encounter physical (and psychological) challenge of a different sort from most that the city can offer. Such places can offer a sense of being immersed in the wider order of natural things, a very powerful experience for some. Such an experience can engender a spiritual response or a feeling of the transcendent – a feeling rarely experienced by many in an increasingly secular society – that seems to be appreciated all the more for its sense that we are just a small part of something much bigger and beyond our imagining or full comprehension.

Turning then to the papers in this Special Issue, we present research that addresses many of the issues outlined above.

Given the statistics on mental illness in Europe, the challenge of coping with stress and mental illnesses such as depression are a growing area of concern. In the UK and across Europe, knowledge workers report more symptoms of stress than other types of workers. Green and natural environments appear to be particularly important for mental wellbeing, and so Gilchrist & Colley's paper is of direct relevance. In their study, mental wellbeing was conceptualised as a combination of both hedonic dimensions of wellbeing (i.e. 'feeling good') and eudaimonic dimensions (i.e. 'functioning well'). Their work thus responds appropriately to expanded definitions of human health, as described above. It usefully builds on Gibson's theory of affordances in considering how the environment might offer evolutionarily developed responses that also serve as opportunities for restoration from work demands. The paper gives valuable information on how people experience the natural environment they visit in a work context but also, importantly, identifies the particular landscape qualities that people choose in order to restore exhausted attention and/or to get stress relief. It highlights the importance of the attention restoration characteristics identified by the Kaplans, such as *getting away* and *soft fascination*, as well as the more focused attention that nature demands at times. Multi-layered vegetation (especially trees) and water associated with 'naturalness', compared with manicured plants or grass, seem to be important here: "nature on its own terms", woodland and water are highlighted.

The authors also identify nature's potential role in enhanced creativity - an interesting topic for further research - as is the haptic and kinaesthetic experience of being outdoors. Jakubec's paper enhances our understanding of this for people with disabilities and their carers, focusing on much wilder natural landscapes as experienced by visits to the Canadian Rocky Mountains and their foothills. This study underlines the value of the multi-sensory experience of nature to the participants: hearing water, feeling the sun's warmth, and a renewed sense of self as a social equal to other, perhaps able-bodied, peers, enhanced by perceiving 'nature in charge'. The playful opportunities that the natural environment offers seem to speak to a fundamental developmental need that is enjoyed even in adulthood, while the spiritual dimension of being in nature is also highlighted.

Barnfield takes a different context and considers the experiences of runners in a post-socialist landscape, in this case Sophia, Bulgaria. But this paper also considers the experience of the landscape, whether built or natural, in the language of phenomenology and affordance. It talks about "being alert and engaged with urban life, participating in an embodied experience of the world", and the relational nature of landscape and people, each taking shape through interactions the other. Barnfield subscribes to non-representational theory (Waterton, 2013) and develops this using concepts resonant with the papers just described. He highlights the relational aspect of affordance, which dissolves the subject-object divide, and sees space as "imbued potentiality that has the power to shape, move, and push in all sorts of ways". This is a valuable way of considering the landscape, not as a background phenomenon lacking agency but as an active force in our world. The paper promotes the idea of developing urban landscapes that are open to physical activities of all types, "to increase physical activity, to nurture health ... and to accommodate all types of

bodies, moving in all sorts of ways”.

Engagement with nature and childhood connections are underlined in the paper by Currie et al. It offers insights into the way that men and women engage with green spaces when undertaking voluntary conservation activities. The themes emerging highlight the value for women of being given the opportunity to learn about and undertake physically demanding outdoor work – traditionally often seen as a male domain – and the importance of childhood links to green places that appear to remain strong and motivating, even when vandalism threatens the place. This study in a deprived community shows that green space attachment can remain strong despite the quality of the green space. It also shows that unemployed men, for example, feel more at ease in such familiar environments as opposed to in the more demanding and codified conventional workplace. Currie et al suggest that the emotionally neutral qualities of green spaces may be an important aspect of their salutogenic properties.

These three papers add depth and nuance to the study by Adevi and Grahn (2012) that suggests people attach strongly to the type of landscape in which they grew up. However, their study also suggests that evolution has made human beings particularly sensitive in responding to certain features of the environment, such as forests, water and characteristics that imply safety (a view, a hiding place), and that place attachment is strongly affected by precisely these features. Such insights provide a context in which we can view, from a 21<sup>st</sup> century perspective, the use of therapeutic landscapes for people with cognitive impairment and mental illness in a movement initiated in the 19<sup>th</sup> century and which fell out of favour in the 20<sup>th</sup> century.

Eastoe's paper describes 19<sup>th</sup> century notions of care for 'imbeciles' and, in particular, attitudes towards the therapeutic value of views of landscape as well as embodied experience of gardens and green space. Such approaches were focused on enhancing the welfare and meaningful existence of institutionalised patients and built on picturesque principles of emotional response to natural, or naturalistic landscapes within easy, everyday access.

Lekkas' paper chimes with Eastoe's in showing us how the landscape has waxed, waned, and waxed again as an important factor in supporting people with a range of mental illnesses. This is an interesting counterpoint to Eastoe's. Whereas Eastoe's focused on the treatments of those classified (in nineteenth century terms) as mentally ill or cognitively impaired, and in doing so sheds light on how the landscape might support this, Lekkas looks at the landscape itself as a symptom of changing attitudes and therapies and concludes with a reflection on how the nineteenth century original aims of an Australian asylum (built on British principles) might actually have reflected values we acknowledge today. The papers remind us how close many of the 19<sup>th</sup> century notions on salutogenic landscapes are to our own 21<sup>st</sup> century experience, as articulated for example in findings by Gilchrist & Colley and by Jakubec.

Indeed, as we consider mental illness and cognitive impairment in terms of public

health treatment and care today, the papers in this issue speak to new, yet revisited, understandings of the ways in which landscape is intimately (and perhaps fundamentally, indissolubly) tied up with human wellbeing. While it is important to recognise the wide spectrum such a description represents in terms of people living with a range of abilities, experiences and conditions, influenced by external circumstances and socio-cultural expectations, it is nonetheless valuable to be reminded of ways in which the landscape may provide relief, shelter, pleasure (hedonia) and meaningful activity (eudaimonia). Lekkas also mentions Parr et al's (2003) highlighting of "the ability of asylum or mental hospital grounds to provide a neutral zone, an asylum", that was once considered important and was eroded in the latter part of the 20<sup>th</sup> century. It has been reimagined in the 21<sup>st</sup> century with the work of researchers such as Grahn (Ottoson and Grahn; 2008; Grahn et al., 2010) and who have used remarkably similar language in talking about the importance of therapeutic landscapes which offer highly stressed individuals a quality of 'emotional tone' which is unthreatening, calm, stable and undemanding, speaking directly to a need in the patient for such.

Building on such concepts, Evered's paper takes the themes of mental health treatment that emerged in late 20<sup>th</sup> century, in particular 'care in the community' and the stages of mental health recovery after illness, and tests them against the experience of urban landscapes for those in recovery. The study is valuable in highlighting the similarities between landscapes of retreat that are valued by those in early stages of recovery, away from busy social demands, and the therapeutic landscapes that 19<sup>th</sup> century landscape designers were eager to provide in asylums. The study also underlines the importance of landscapes of varying social expectations and emotional tone necessary to support those who have suffered from mental illness. It emphasises the value of green spaces that can help people manage their own progress towards recovery, allowing small, retreat-like places within the public environment, in contrast to the insistence on vibrant and busy urban places so often advocated by urban designers. Evered also emphasises the importance of childhood memories as part of the social, cultural and symbolic meanings and values that mediate people's experience of place and thus how the physical landscape may (or may not) offer therapeutic benefits to people with mental ill health.

Butterfield's study takes cancer treatment patients as the focus for landscapes of wellbeing and offers a succinct overview of the role that Maggie's Centre landscapes play in therapeutic encounters, suggesting that it is in the 'everyday' elements of the environment that small acts of kindness are played out. Places such as the garden threshold offer a similar role to the kitchen table, places where people encounter each other, mingle and linger, perhaps with no particular purpose in mind but offering an experience that is therapeutic. Indeed, perhaps the garden or the natural setting is a place where we are all more emotionally predisposed towards kindness and sensitivity, whether to our own species or to others. Recent research supports such notions, suggesting that exposure to nature may increase social cooperation and sustainable behavior (Zelinski et al, 2015).

## **Conclusion**

Whether we are considering those in stressful jobs, those facing the challenges of

unemployment, physical or cognitive impairment, ill-health or being a carer, then the potential for landscapes to be health enhancing is ever more important. On the one hand, we need to be realistic about how much difference the landscape can make to people's lives in a context where family and personal relationships, economic uncertainty, etc. will always have a major effect on how people feel. Access to salutogenic landscapes cannot, of course, overcome the problems such personal circumstances may bring. On the other hand, the evidence presented here suggests that access to such landscapes may help people cope better with the stresses and demands of such circumstances and help buffer their response, in particular offering support for the mental resilience that is needed to cope with our challenging, urbanised and changing world.

The papers raise useful questions for future research that include the ongoing need to be more precise in describing the particular landscape qualities that are associated with health benefits. This remains a very challenging aspect of this type of research, and one not easily addressed within a single research project. Gilchrist and Colley's paper has gone some way towards this, building on the work of Ottoson, Grahn and colleagues. The papers by Eastoe, Lekkas and Evered offer historical and recent perspectives on what might be important for those with cognitive impairment or mental illness, from the 19<sup>th</sup> century to the 21<sup>st</sup>. In future research, we need to continue with as much precision as we can to get a better understanding of what landscapes are needed to support health in the full range and diversity of sub-populations that make up our urbanised environments. It seems likely that diverse landscape types will be important to serve diverse health needs, but we are still some way from being able to specify these with confidence in the supporting evidence.

Mixed methods approaches are likely to offer a useful way forward but these remain a challenge to do well. They require a range of skills and expertise not often found in one individual. However, with multidisciplinary teams increasingly being considered the norm, this should not be a major deterrent to future studies. The focus of the papers in this Special Issue has been predominantly a qualitative one, and there is great strength in that. However, I look forward to increasing use of mixed methods in research that combine the rigour of statistical analysis with rigour, sophistication and reflexivity of a different sort in using qualitative approaches.

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